IN THE SPECIFICATION:

The paragraph beginning at page 5, line 4 has been amended as follows:

A number of images within the different stimulation phases are now registered with the magnetic resonance apparatus 2. In the illustrated example, respectively five images ~~8~~ <u>7</u> are registered per phase, i.e. with a given stimulation as well as without stimulation. The image exposure is triggered corresponding to the time triggering of the stimulation source. This makes it possible to allocate an information value with respect to the respective stimulation phase within which the image ~~8~~ <u>7</u> was registered to each image ~~8~~ <u>7</u>. In addition, the information value can be used to indicate whether the respectively registered image is to be ignored or not within the framework of the evaluation. In the illustrated example, the information value sequence reads "IAAAI-IBBBI-IAAAI-...", whereby A = actively stimulated phase, B = non-stimulated phase, I = ignore image. Of the five images registered per phase, thus, the first and last are not taken into consideration in the evaluation; the three remaining images are evaluated.

The paragraph beginning at page 5, line 16 has been amended as follows:

As stated, the exposure of the images ~~8~~ <u>7</u> is triggered dependent on the stimulation. In the illustrated exemplary embodiment, five images are registered per stimulation phase, at the times t_{m1}, t_{m2},...,t_{m5}, t_{o1}, t_{o2},....,t_{o5}, t_{m6}, t_{m7},... (t_m = with stimulation; t_o = without stimulation). A first evaluation, further, ensues after the registration of each individual image ~~8~~ <u>7</u>. In the framework

thereof, each individual image and, within this individual image, each individual picture element is correlated with reference to a correlation curve K. The correlation curve K is determined by the examining physician before the measurement. In the illustrated example, the correlation is implemented on the basis of a sinusoidal correlation curve K since the brain does not supply a discontinuous reply to an external stimulus but rises slowly up to a maximum of approximately 2 sec and then likewise requires a certain time upon shut-off until the signal has decayed. Within the framework of the evaluation, a corresponding, time-related evaluation correlation value k_{m1}, k_{m2},..., k_{m5}, k_{o1}, k_{o2},..., k_{o5}, k_{m6},... is selected for each exposure time t_{m1}, t_{m2},...,t_{o1}, t_{o2},... regardless of the phase. The evaluation then supplies a value that represents a criterion for the difference that the respective picture element signal exhibits with reference to the value of the correlation curve. A statistical evaluation thus ensues with reference to the images registered within the measurement (for example, 100 images overall can be registered within a measurement; of course, more images can also be registered), an overall image being present at the end of the statistical evaluation that shows the active zone of the brain. The active zones of the are brain derived statistically by taking the differences inherent in the picture elements into consideration over the total number of registered images. The stimulated brain zones are revealed within the final image on the basis of clearly brighter areas.

The paragraph beginning at page 6, line 15 has been amended as follows:

Finally, each individual image B $\underline{7}$ and a family of information related thereto are stored in a memory area 6 of the magnetic resonance apparatus 2, these enabling a later evaluation of the image series since the operating, stimulation and evaluation parameters undertaken by the examining physician during the measurement and the initial evaluation are known per individual image. In the illustrated example, the exposure point in time t_{m1}, the correlation value k_{m1} related to the exposure point in time, the phase information value I as well as the stimulation value T_w (for example, the brightness of the light source 4) are stored for the first image B $\underline{7}$. The exposure point in time t_{m2}, the correlation value k_{m2}, the phase information value A and the stimulation value T_w are stored to the second registered image, etc.